UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

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REALTIME DATA, LLC d/b/a IXO,   :

                 Plaintiff,   :   11 Civ. 6696 (KBF)
                              :   11 Civ. 6701 (KBF)
          -v-   :   11 Civ. 6704 (KBF)
                              :

MORGAN STANLEY, et al.,   :

               Defendants.   :

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REALTIME DATA, LLC d/b/a IXO,   :

                              :   11 Civ. 6697 (KBF)
             Plaintiff,   :   11 Civ. 6699 (KBF)
                              :   11 Civ. 6702 (KBF)
         -v-   :

CME GROUP INC., et al.,   :

               Defendants.   :

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REALTIME DATA, LLC d/b/a IXO,   :

                              :   11 Civ. 6698 (KBF)
              Plaintiff,   :   11 Civ. 6700 (KBF)
                              :   11 Civ. 6703 (KBF)
          -v-   :

                              :   OPINION AND ORDER
THOMSON REUTERS, et al.,   :   (Motion 10)

               Defendants.   :

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KATHERINE B. FORREST, District Judge:

From June through September 2012, this Court rendered decisions on a number of summary judgment motions made by various defendants in the above-captioned series of sprawling and related patent suits. This Opinion and Order is

the Court's last decision on the numerous and voluminous summary judgment motions at this time.

In keeping with its practices of referring to the summary judgment motions by Court-assigned number, this Court refers to the motion addressed in this Opinion and Order as "Motion No. 10"--the Motion for Summary Judgment of Non-Infringement: Data Stream, Content Independent Encoding and Lossless Claim Limitations by defendants NYSE Euronext, NYSE ARCA, Inc. ("ARCA"), NYSE AMEX, LLC ("AMEX"), Securities Industry Automation Corporation ("SIAC," and with NYSE Euronext, ARCA, and AMEX, "NYSE"), and Options Price and Reporting Authority, LLC ("OPRA").[1]

For the reasons discussed below, the motion is GRANTED IN PART and DENIED IN PART.

I.   BACKGROUND

Plaintiff Realtime Data, LLC ("Realtime") has asserted that NYSE and OPRA infringe claims from U.S. Patent No. 7,417,568 (the "'568 Patent"), 7,777,651

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[1] Motion No. 10 is joined by the Bank Defendants--The Goldman Sachs Group, Inc.; Goldman, Sachs & Co., Goldman Sachs Execution & Clearing L.P.; J.P. Morgan Chase & Co.; J.P. Morgan Securities, Inc.; J.P. Morgan Clearing Corp.; Morgan Stanley; Morgan Stanley & Co., Incorporated; Credit Suisse Holdings (USA), Inc.; Credit Suisse Securities (USA) LLC; HSBC Bank USA, N.A.; and HSBC Securities (USA), Inc.--as well as defendants Factset Research Systems, Inc., Bloomberg L.P., Interactive Data Corporation, BATS Trading Inc., NASDAQ OMX Group, Inc.; and NASDAQ OMX PHLX, Inc.

Although the parties had requested that the Court rule only upon the "data stream" issue presented in Motion No. 10 as it related to NYSE and OPRA, for sake of completeness, the Court has ruled on all issues presented by the motion--consistent with its rulings in Realtime Data LLC v. Morgan Stanley, et al., --- F. Supp. 2d ---, 2012 WL 4341808 (S.D.N.Y. Sept. 24, 2012).

(the "'651 Patent"), and 7,714,747 (the "'747 Patent," and with the '568 and 651 Patents, the "patents-in-suits").[2]

The Court assumes familiarity with its various prior summary judgment decisions in this matter, see Realtime Data LLC v. Morgan Stanley, et al., --- F. Supp. 2d ---, 2012 WL 4341808 (S.D.N.Y. Sept. 24, 2012) (the "September Opinion" or "Sept. Op."); Realtime Data LLC v. Morgan Stanley et al., 2012 WL 3158196 (S.D.N.Y. Aug. 2, 2012); Realtime Data LLC v. Morgan Stanley, et al., 2012 WL 2545096 (S.D.N.Y. June 27, 2012); Realtime Data LLC v. Morgan Stanley, et al., 2012 WL 2434750 (S.D.N.Y. June 26, 2012), as well as the Court's opinion on claims construction, Realtime Data, LLC v. Morgan Stanley, --- F. Supp. 2d---, 2012 WL 2394433 (S.D.N.Y. June 22, 2012) (the "Markman opinion"). Together, these opinions summarize various aspects of the inventions at issue and provide background helpful to understanding the instant motion.[3]

NYSE and OPRA assert three separate bases for summary judgment, each of which bears similarity to arguments made by different defendants, and addressed in the September Opinion, see Realtime Data LLC, 2012 WL 4341808:

First, NYSE and OPRA urge that all of the asserted claims in the '568 Patent require the analysis of a data field that is in a "data stream" fall short since, prior to compression, each of their Accused Instrumentalities removes data, adds data, or

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[2] Asserted claims of the '568 Patent against these defendants include 15, 20, 22 and 32. Asserted independent claims of the '651 Patent against these defendants include 13, 22, 29, 43, 91 and 108. Asserted independent claims of the '747 Patent against these defendants include 14 and 19.

[3] Defined terms or proper names used herein have the same meaning as in the Court's September Opinion.

does not transmit the data blocks in sequence.   ISE moved for summary judgment on the basis that the required analysis of the data field in the data stream was not met. (See, e.g., Mem. of Law in Support of ISE's Mot. for Summ. J. of Noninfringement (11 Civ. 6697, Dkt. No. 685) ("ISE Mem. Mot. 4") at Arguments A and G.) With respect to ISE, the Court found that on the record before it, summary judgment was warranted based on ISE's Argument G. See Sept. Op., 2012 WL 4341808, at *10-11. Based upon the record relating to NYSE and OPRA, this Court finds that Realtime has not raised a triable issue of fact as to the particular arguments NYSE and OPRA have made in this regard and thus, that summary judgment is warranted.

Second, certain claims of the '747 and '651 Patents require the application of content independent encoding ("CIC"). OPRA and NYSE argue that the transfer encoding they employ is not content independent. This is similar to the argument made and by ISE and determined by the Court in the portion of the September Opinion relating to Motion No. 4. Sept. Op., 2012 WL 4341808, at *5-6. The Court denied summary judgment to ISE based on a similar argument as that pursued by NYSE and OPRA here.

According to NYSE and OPRA, their Accused Instrumentalities do not utilize CIC. However, there are expert declarations submitted on both sides of this issue-- and the Court cannot resolve the disputed issues on a motion for summary judgment. Accordingly, summary judgment on this basis is denied.

Third and finally, NYSE and OPRA argue that certain claims of both the '747 and '651 Patents require "lossless" encoding or decoding--and that their Accused Instrumentalities use "stop bit encoding" which is not lossless. This is similar to an argument raised by ISE in Argument F in Motion No. 4. There, the Court found that expert testimony on this issue raised a material issue of fact properly decided by a jury. Sept. Op., 2012 WL 4341808, at *9-10. Here, similar issues preclude summary judgment.

II.   DISCUSSION

A.   Legal Standard

Summary judgment is warranted if the pleadings, the discovery and disclosure materials, along with any (admissible) affidavits, demonstrate that there is no genuine issue of fact necessitating resolution at trial. Fed. R. Civ. P. 56(c); see also Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 247 (1986); Celotex Corp. v. Catrett, 477 U.S. 317, 322-323 (1986). A party moving for summary judgment bears the initial burden of demonstrating that no genuine issue of material fact exists; all reasonable inferences should be drawn in favor of the non-moving party. See Liberty Lobby, 477 U.S. at 255; Cont'l Can Co. USA, Inc. v. Monsanto Co., 948 F.2d 1264, 1265 (Fed. Cir. 1991). The burden then shifts to the non-moving party to come forward with "admissible evidence sufficient to raise a genuine issue of fact for trial in order to avoid summary judgment." Jaramillo v. Weyerhauser Co., 536 F.3d 140, 145 (2d Cir. 2008); see also Glaverbel Societe Anonyme v. Northlake Mktg. & Supply, Inc., 45 F.3d 1550, 1560-61 (Fed. Cir. 1995) ("When the movant's burden of

establishing the lack of a genuine issue of material fact has been met 'in facial

terms,' the nonmovant must point to 'some evidence in the record sufficient to

suggest that his view of the issue might be adopted by a reasonable factfinder.'"

(quoting Resolution Trust Corp. v. Juergens, 965 F.2d 149, 151 (7th Cir. 1992))).

Where the non-moving party would bear the ultimate burden of proof on an issue at

trial, the moving party satisfies its burden on the motion by pointing to an absence

of evidence to support an essential element of the non-movant's claim. See

Intellicall, Inc. v. Phonometrics, Inc., 952 F.2d 1384, 1389 (Fed. Cir. 1992).

Where it is clear that no rational trier of fact could find in favor of the non-

moving party, summary judgment is warranted. See Liberty Lobby, 477 U.S. at 248.

However, the mere possibility that a dispute may exist, without more, is not

sufficient to overcome a convincing presentation by the moving party. Id. at 247-48.

Similarly, mere speculation or conjecture is insufficient to defeat a motion. W.

World Ins. Co. v. Stack Oil, Inc., 922 F.2d 118, 121 (2d Cir. 1990).

In ruling on a motion for summary judgment, a court cannot, however, weigh

the evidence or make credibility determinations: those are the functions of the jury.

See Liberty Lobby, 477 U.S. at 255. Further, when there are dueling experts, both

of whom have put forward opinions in contradiction with each other, and when

those opinions are important to resolution of a material factual dispute, summary

judgment may not be appropriate. See Hodosh v. Block Drug Co., Inc., 786 F.2d

1136, 1143 (Fed. Cir. 1986) ("The fact issues herein must be resolved by trial in

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which the conflicting views of the experts will be subject to the refining fire of cross examination.").

The question is whether, at this stage of the proceeding, the court can determine whether the expert is merely asserting his own ipse dixit, which would be insufficient to defeat summary judgment, or whether two experts in the field could have reasonable differences. If it is the latter, then the Court must leave credibility determinations and the weighing of the experts' opinions to the jury.

B.   Do the Accused Instrumentalities Meet the "Data Stream" Requirement?

In the Markman opinion, the Court construed the term "data stream" as requiring "one or more blocks transmitted in sequence from an external source whose characteristics are not controlled by the encoder or decoder." See Markman opinion, 2012 WL 2394433, at *16.

There are four different encoders that Realtime asserts infringe claims 15, 20, 22 and 32 of the '568 Patent: OPRA Encoding, ArcaBook Encoding, Filtered Options Feed Encoding, and XDP Depth of Book.[4] Each of those Accused Instrumentalities has its own technology that must be considered in connection with an infringement claim:

1.   OPRA Encoding

(a)   Internal OPRA encoding: the OPRA system receives a
message from PartiApps; PartiApps deblocks the
message, converts it into binary format, inserts a time

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[4] Realtime has not pursued its claim with respect to XDP Depth of Book; the Court therefore will not address that product further.

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stamp message, and regroups the messages by option

symbol. After these steps have all occurred, the message

now has internally sourced data and sequencing changes.

(See Decl. of Robert Jakob in Supp. of NYSE and OPRA's

Mot. for Summ. J. (Dkt. No. 702) ("Jakob Dec.") ¶¶14-15,

Ex. A.)

    (b)   High Speed Line Applications ("HSlApps") receive the

message from PartiApps. Prior to those messages

undergoing FAST compression, they are altered again:

HS1Apps are deblocked, a time stamp is inserted, a

sequence number is inserted, and a retransmission

requester field is inserted. The messages are then

regrouped. As with PartiApps, the HSlApps now have

internally sourced data and sequence changes.

2. ArcaBook Encoding

    (a)   ArcaBook for Equities utilizes both front- and back-end

servers. When a message is received at its front-end

server, the server adds a sequence number to each

message and places the message into the send buffer. As

a result, the characteristics of the data have been

internally altered; when these messages get to the back-

end server they are therefore different from what was externally received by the front-end server.

    (b)   ArcaBook for Options works differently--it does not have a front-end server. The messages that ArcaBook for Options compresses are generated by the back-end server itself; the messages therefore do not come from an external source.

3. <u>Filtered Options Feed</u>

    (a)   OPRA's Filtered Option Feed receives data encoded in the OPRA FAST format. Prior to compression, the feed decodes the OPRA FAST message, creates message objects (including by discarding certain objects), and inserts sequence numbers into the message. As a result, the messages that enter the Filtered Option Feed from the external source are internally altered prior to compression

NYSE and OPRA correctly point out that Realtime fails to make any specific evidentiary showing with respect to whether the three specific Accused Instrumentalities encode data that is in the form of a data stream at the time of encoding: this includes, for instance, an absence of any specific facts relating to how any of the specific encoding products work.

Realtime relies on the generalized statements of its expert, Dr. Ian Shamos. In paragraphs 20-22 of that declaration, Dr. Shamos provided general opinions regarding the data stream requirement for all Accused Products (from any of the dozens of defendants). There is simply nothing in Dr. Shamos' declaration that specifically addresses the NYSE and OPRA data streams, the content of those streams, or the particular way in which their specific encoders act on the data.

The descriptions of NYSE and OPRA's three Accused Instrumentalities here are therefore supported by what is basically an unrebutted factual declaration by defendants' expert: The descriptions of the Accused Instrumentalities all indicate that the data that enters those instrumentalities is internally altered in some fashion and out of the original sequence. That fact is therefore taken as true; there is no triable issue of fact. These three Accused Instrumentalities cannot meet the definition of "data stream" necessary for the asserted claims in the '568 Patent. Summary judgment is granted on this basis.

C.   Is Transfer Encoding Content Independent?

This Court has previously construed "content independent data compression" to mean

> compression that is applied to input data that is not compressed with
> content dependent data compression, the compression applied using
> one or more encoders without regard to the encoder's (or encoders')
> ability to effectively encoded the data block type (or data field type).

Markman opinion, 2012 WL 2394433, at *16.

According to NYSE and OPRA (and as ISE argued in Motion No. 4), Realtime's infringement contentions (and Dr. Shamos) rely upon stop bit encoding

to meet the content independent data compression requirement.   Defendants argue that stop bit encoding--or transfer encoding--is only used on certain data types and not others and therefore must be content dependent. According to Dr. Storer, on whose declaration defendants rely, stop bit encoding always results in an expansion of the data block. Dr. Storer refers to the "principal creator of FAST, Rolf Anderson" for the point that "byte vectors" are used when stop bit encoding is not optimal. (Decl. of James Storer in Support of NYSE & OPRA's Mot. for Summ. J. ("Storer Decl. Mot. 10") Ex. C at 7.) Moreover, section 10.6 of the FAST standard also states that stop bit encoding is useful for only certain data types. (Id. ¶¶18, 21-22, Ex. B. §10.6.)

Realtime responds to defendants' arguments in a manner similar to its response to ISE's motion: transfer encoding--which defendants concede they use--is used when other types of encoders are not optimal; that does not mean that the content of the data block is known. In fact, according to Realtime, the content of the data block can nonetheless be one of several different types including fields containing integer numbers, signed integers, unsigned integers, scaled numbers and ASCII strings. The debate between the parties can be characterized as whether transfer or stop bit encoding must work with all types of content in order for it to be considered "content independent." This is not a question this Court can resolve on the record before it.

Whether transfer encoding--which is used when other encoding techniques are not optimal, but when the content can be one of a number of different types--is

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content independent is a question of fact for the jury. Accordingly, the Court denies summary judgment on this basis.

D.   Is Stop Bit Encoding Lossless?

Defendants argue that each of the asserted claims in the '651 and '747 Patents require lossless encoding or decoding. This Court previously construed "lossless" to mean "technique, software or hardware that fully preserves the original unencoded data such that the decoded data is identical to the unencoded data." Realtime Data, 2012 WL 2394433, at *16. The heart of the dispute on this issue is not whether stop bit encoding adds or drops bits--the issue is whether once stop bit encoding has been applied, would the decoded data be identical to the original encoded data.

Defendants argue, without citation to an expert declaration or any other evidence, that "it is impossible to losslessly decode data that was not losslessly encoded." That may or may not be true--the Court certainly cannot make that judgment at this stage of the proceeding. In contrast, Dr. Shamos' declaration in support of Realtime's position (and motion for summary judgment on infringement) does claim that data that has been stop bit encoded can be decoded with the result being bit for bit identical data. (Shamos Decl. ¶ 35.)

Accordingly, there is a triable issue of fact as to whether stop bit encoding is lossless and summary judgment is denied on this basis.
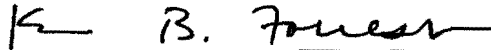
III.   CONCLUSION

For the reasons set forth above, summary judgment is GRANTED to NYSE

and OPRA as to all asserted claims of the '568 Patent; summary judgment is

DENIED on the bases set forth above relating to the '651 and '747 Patents.

The Clerk of the Court is directed to terminate the motion at

- 11 Civ. 6697, Dkt. No. 697

- 11 Civ. 6699, Dkt. No. 123

- 11 Civ. 6702, Dkt. No. 165

SO ORDERED:

Dated: New York, New York
              November 9 , 2012

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                                        KATHERINE B. FORREST
                                        United States District Judge